

Storm Data and Unusual Weather Phenomena - October 2012

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
ILLINOIS, South				
(IL-Z080) PERRY, (IL-Z081) FRANKLIN, (IL-Z082) HAMILTON, (IL-Z083) WHITE, (IL-Z084) JACKSON, (IL-Z085) WILLIAMSON, (IL-Z086) SALINE, (IL-Z087) GALLATIN, (IL-Z088) UNION, (IL-Z089) JOHNSON, (IL-Z090) POPE, (IL-Z091) HARDIN, (IL-Z092) ALEXANDER, (IL-Z093) PULASKI, (IL-Z094) MASSAC				

10/01/12 00:00 CST	0	Drought
10/31/12 23:59 CST	0	

Very slight improvement in long-term drought conditions occurred during the month of October. While the more active fall weather pattern resulted in more frontal passages in October, most locations still reported below normal precipitation for the month. The drought officially ended along and west of a Carbondale to Benton line. Severe drought conditions in the far south improved to moderate drought conditions. By the end of the month, all areas south of a line from Carbondale to Carmi were in moderate drought conditions. The main impact of the long-term drought was on farm ponds used for irrigating fields or raising livestock. Soil moisture was near normal. The soybean crop was harvested, but soybean crop loss estimates were not available yet. Some pastures remained in poor or very poor condition, but many of them improved to adequate condition. Streamflows were running about normal. At the Carbondale airport, October rainfall was 3.75 inches, which was just a tenth of an inch below normal. The drought began in May and continued into November in most areas.

PULASKI COUNTY --- 1.0 NW KARNAK [37.29, -88.98]

10/03/12 19:02 CST	0	Hail (0.88 in)
10/03/12 19:02 CST	0	Source: Trained Spotter

The hail was reported off Highway 37.

JOHNSON COUNTY --- WEST VIENNA [37.43, -88.97]

10/03/12 19:19 CST	0	Hail (1.00 in)
10/03/12 19:19 CST	0	Source: Trained Spotter

Wind gusts to 45 mph were reported at the same location.

Scattered thunderstorms developed beneath an upper-level low over central and southern Illinois. Warm and humid southerly winds in the low levels fueled locally strong thunderstorms along with an isolated report of large hail.

(IL-Z075) JEFFERSON, (IL-Z076) WAYNE, (IL-Z077) EDWARDS, (IL-Z078) WABASH, (IL-Z080) PERRY, (IL-Z081) FRANKLIN, (IL-Z082) HAMILTON, (IL-Z083) WHITE, (IL-Z084) JACKSON, (IL-Z085) WILLIAMSON, (IL-Z086) SALINE

10/08/12 03:00 CST	0	Frost/Freeze
10/08/12 06:00 CST	0	

A large dome of high pressure gradually shifted southeast into the Ohio Valley. This high pressure system brought the coldest air so far in the fall season. Frost was rather widespread along and north of a line from Carbondale to Carmi.

(IL-Z075) JEFFERSON, (IL-Z076) WAYNE, (IL-Z077) EDWARDS, (IL-Z078) WABASH, (IL-Z080) PERRY, (IL-Z081) FRANKLIN, (IL-Z082) HAMILTON, (IL-Z083) WHITE, (IL-Z084) JACKSON, (IL-Z085) WILLIAMSON, (IL-Z086) SALINE, (IL-Z087) GALLATIN, (IL-Z088) UNION, (IL-Z089) JOHNSON, (IL-Z090) POPE, (IL-Z091) HARDIN, (IL-Z092) ALEXANDER, (IL-Z093) PULASKI, (IL-Z094) MASSAC

10/11/12 02:00 CST	0	Frost/Freeze
10/11/12 07:00 CST	0	

High pressure moved slowly eastward across the Lower Ohio Valley, producing clear skies and light winds. These conditions were ideal for widespread frost. A few areas even fell slightly below freezing.

PERRY COUNTY --- 3.5 S DU QUOIN [37.97, -89.23], 1.3 E CLINCH [37.97, -89.21]

10/17/12 17:35 CST	0.10M	Thunderstorm Wind (EG 78 kt)
10/17/12 17:36 CST	0	Source: Emergency Manager

A microburst with estimated wind gusts up to 90 mph occurred along Highway 14. Several roofs were damaged on homes and farm buildings. A church was damaged. Underpinning was blown from a mobile home. A radio antenna was bent. A tree landed on a carport. Another tree landed on a house. Numerous trees and power lines were blown down.

ALEXANDER COUNTY --- MC CLURE [37.32, -89.43], EAST CAPE GIRARDEAU [37.30, -89.25]

10/17/12 18:10 CST	8K	Thunderstorm Wind (EG 56 kt)
10/17/12 18:20 CST	0	Source: Trained Spotter

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Several large branches and trees were blown down. The damaging storm crossed the Mississippi River from Cape Girardeau. A trained spotter estimated wind gusts to at least 60 mph.				

UNION COUNTY --- LICK CREEK [37.52, -89.07]

10/17/12 18:27 CST	2K	Thunderstorm Wind (EG 52 kt)
10/17/12 18:27 CST	0	Source: Public

Several large tree branches were blown down.

A squall line of thunderstorms swept eastward ahead of a strong 500 mb shortwave trough exiting from eastern Kansas into western Missouri. The squall line occurred along a strong surface cold front. Low level southerly winds in the vicinity of the storms were around 40 knots. A few damaging wind gusts occurred with some of these storms.

INDIANA, Southwest

(IN-Z085) POSEY, (IN-Z086) VANDERBURGH, (IN-Z087) WARRICK, (IN-Z088) SPENCER

10/01/12 00:00 CST	0	Drought
10/25/12 14:00 CST	0	

Improvement in long-term drought conditions occurred during the month of October. The more active fall weather pattern resulted in more frontal passages in October, bringing near normal precipitation. The drought which began in May officially ended across southwest Indiana late in the month. The soybean crop was harvested, but soybean crop loss estimates were not available yet. Streamflows were running about normal. At the Evansville airport, October rainfall was 2.90 inches, which was just a third of an inch below normal.

(IN-Z081) GIBSON, (IN-Z082) PIKE, (IN-Z085) POSEY, (IN-Z086) VANDERBURGH, (IN-Z087) WARRICK, (IN-Z088) SPENCER

10/11/12 02:00 CST	0	Frost/Freeze
10/11/12 07:00 CST	0	

High pressure moved slowly eastward across the Lower Ohio Valley, producing clear skies and light winds. These conditions were ideal for widespread frost. A few areas even fell slightly below freezing.

KENTUCKY, Southwest

(KY-Z001) FULTON, (KY-Z002) HICKMAN, (KY-Z003) CARLISLE, (KY-Z004) BALLARD, (KY-Z005) MCCrackEN, (KY-Z006) GRAVES, (KY-Z007) LIVINGSTON, (KY-Z008) MARSHALL, (KY-Z009) CALLOWAY, (KY-Z010) CRITTENDEN, (KY-Z011) LYON, (KY-Z012) TRIGG, (KY-Z013) CALDWELL, (KY-Z014) UNION, (KY-Z015) WEBSTER, (KY-Z016) HOPKINS, (KY-Z017) CHRISTIAN, (KY-Z018) HENDERSON, (KY-Z019) DAVIESS, (KY-Z020) MCLEAN, (KY-Z021) MUHLENBERG, (KY-Z022) TODD

10/01/12 00:00 CST	0	Drought
10/31/12 23:59 CST	0	

Slow improvement in long-term drought conditions occurred during the month of October. While the more active fall weather pattern resulted in more frontal passages in October, most locations still reported below normal precipitation for the month. The drought officially ended along and east of a Hopkinsville to Owensboro line. The area of severe drought conditions shrank, and the area of extreme drought disappeared. By the end of the month, areas along and west of the Kentucky Lake region were in severe drought. The remainder of the drought area was classified as moderate. The main impact of the long-term drought was on farm ponds used for irrigating fields or raising livestock. Soil moisture was near normal. The soybean crop was harvested, but soybean crop loss estimates were not available yet. Some pastures remained in poor or very poor condition, but many of them improved to adequate condition. Streamflows were running about normal. At Paducah, October rainfall was 2.92 inches, which was about an inch below normal. The year-to-date rainfall deficit hovered around 16 inches. The drought began in May and continued into November in most areas.

(KY-Z001) FULTON, (KY-Z002) HICKMAN, (KY-Z003) CARLISLE, (KY-Z004) BALLARD, (KY-Z005) MCCrackEN, (KY-Z006) GRAVES, (KY-Z007) LIVINGSTON, (KY-Z008) MARSHALL, (KY-Z009) CALLOWAY, (KY-Z010) CRITTENDEN, (KY-Z011) LYON, (KY-Z012) TRIGG, (KY-Z013) CALDWELL, (KY-Z014) UNION, (KY-Z015) WEBSTER, (KY-Z016) HOPKINS, (KY-Z017) CHRISTIAN, (KY-Z018) HENDERSON, (KY-Z019) DAVIESS, (KY-Z020) MCLEAN, (KY-Z021) MUHLENBERG, (KY-Z022) TODD

10/11/12 02:00 CST	0	Frost/Freeze
10/11/12 07:00 CST	0	

High pressure moved slowly eastward across the Lower Ohio Valley, producing clear skies and light winds. These conditions were

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ideal for widespread frost. A few areas even fell slightly below freezing.				
GRAVES COUNTY --- 1.9 WNW MAYFIELD [36.74, -88.66], 2.1 N MAYFIELD [36.76, -88.63]				
	10/14/12 05:42 CST		0.35M	Tornado (EF1, L: 2.28 mi , W: 150 yd)
	10/14/12 05:44 CST	1	0	Source: NWS Storm Survey

Top wind speeds were estimated near 105 mph. The average path width was 130 yards. Two dozen homes and several businesses received minor damage, mainly to shingles, siding, and fascia. There was moderate damage to one business, which was partially unroofed. Windows were blown out, and cars were moved over. Numerous trees and power lines were blown down. A high school football stadium was extensively damaged. The damage path began about one-quarter mile southeast of the Highway 80 and Purchase Parkway intersection. The moderately damaged business was located near the beginning of the damage path. A man was hospitalized after a section of wind-blown roof from the damaged business blew into the room he was in. The man suffered numerous cuts and broken bones. His house was heavily damaged. A 2x4 stud was driven by the wind and became embedded in a living room interior wall. The tornado damage path ended about one-half mile northeast of the intersection of Highways 45 and 121.

A broken line of showers and thunderstorms swept eastward ahead of a strong cold front over western Missouri. The line of convection was fueled by very strong southerly low level winds from 50 to 60 knots at 850 mb. An isolated tornado occurred in this very high-shear environment, despite the lack of any cloud-to-ground lightning with the parent cell. Strong forcing and wind shear compensated for very weak instability.



Photo of damaged structure in Mayfield, from NWS Paducah storm damage survey team.

DAVIESS COUNTY --- WHITESVILLE [37.68, -86.88]				
	10/18/12 12:23 CST		0	Hail (0.88 in)
	10/18/12 12:23 CST		0	Source: NWS Employee

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The hail was associated with passing rain showers.

An isolated heavy rain shower produced nickel hail. The isolated activity occurred ahead of a strong cold front as it moved east across the Mississippi Valley.

MISSOURI, Southeast

(MO-Z076) PERRY, (MO-Z086) BOLLINGER, (MO-Z087) CAPE GIRARDEAU, (MO-Z100) WAYNE, (MO-Z107) CARTER, (MO-Z108) RIPLEY, (MO-Z109) BUTLER, (MO-Z110) STODDARD, (MO-Z111) SCOTT, (MO-Z112) MISSISSIPPI, (MO-Z114) NEW MADRID	10/01/12 00:00 CST	0	Drought
	10/31/12 23:59 CST	0	

Slight improvement in long-term drought conditions was observed during the month of October. While the more active fall weather pattern resulted in more frontal passages in October, most locations still reported below normal precipitation for the month. The drought officially ended in Perry County. The small area of extreme drought conditions that had been near the Bootheel area improved to severe drought. By the end of the month, areas south and west of a line from Cape Girardeau to Greenville were in severe drought. The remainder of the drought area was classified as moderate. The main impact of the long-term drought was on farm ponds used for irrigating fields or raising livestock. Soil moisture was near normal. The soybean crop was harvested, but soybean crop loss estimates were not available yet. Some pastures remained in poor or very poor condition, but many of them improved to adequate condition. Streamflows were running about normal. At Cape Girardeau, October rainfall was 2.58 inches, which was about an inch-and-a-quarter below normal. The year-to-date rainfall deficit hovered around 13 inches. The drought began in May and continued into November in most areas.

(MO-Z076) PERRY, (MO-Z086) BOLLINGER, (MO-Z100) WAYNE, (MO-Z107) CARTER	10/08/12 03:00 CST	0	Frost/Freeze
	10/08/12 06:00 CST	0	

A large dome of high pressure gradually shifted southeast into the Ohio Valley. This high pressure system brought the coldest air so far in the fall season. Frost was rather widespread along and northwest of a line from Van Buren and Greenville to Perryville.

(MO-Z076) PERRY, (MO-Z086) BOLLINGER, (MO-Z087) CAPE GIRARDEAU, (MO-Z111) SCOTT	10/11/12 02:00 CST	0	Frost/Freeze
	10/11/12 07:00 CST	0	

High pressure moved slowly eastward across the Mid-Mississippi Valley, producing clear skies and light winds. These conditions were ideal for widespread frost. A few areas even fell slightly below freezing. The frost and freezing temperatures were along and north of a line from Marble Hill to Sikeston.

CAPE GIRARDEAU COUNTY --- CAPE GIRARDEAU [37.30, -89.53]	10/17/12 18:08 CST	20K	Thunderstorm Wind (EG 52 kt)
	10/17/12 18:08 CST	0	Source: Trained Spotter

Several large branches and trees were blown down. At least a couple of trees landed on houses, and a few others landed on roads. A trained spotter estimated wind gusts to at least 60 mph. The damaging storm crossed the Mississippi River into Alexander County, Illinois.

A squall line of thunderstorms swept eastward ahead of a strong 500 mb shortwave trough exiting from eastern Kansas into western Missouri. The squall line occurred along a strong surface cold front. Low level southerly winds in the vicinity of the storms were around 40 knots. A few damaging wind gusts occurred with some of these storms.